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## Preface

### Special Volume

#### Network Communications Broadcasting and Gossiping

The idea of organizing a special volume on Network Communications was first discussed at a workshop held in Parksville, B.C., in the summer of 1994. The workshop was the fifth in a series of annual workshops held alternately near Vancouver, B.C., and near Marseille, France, and many of the authors of this collection of papers are regular attendees of the workshops. An earlier special volume of Discrete Applied Mathematics, Proceedings International Workshop on Broadcasting and Gossiping (volume 53), edited by Arthur Liestman and Dana Richards, is based on papers submitted in 1991 after the first of the annual workshops. The rapid evolution of the technology of network communications is reflected in the theory of network communications, and by 1994 the need for a second collection of papers, emphasizing new developments was becoming apparent. When we proposed the idea to Peter Hammer, he supported it enthusiastically, and a general call for papers was issued. The papers in this volume were submitted during the spring and summer of 1995.

This volume can also be regarded as a complement to both Volume 53, and to the special volume, Interconnection Networks (volumes 37/38), edited by Jean-Claude Bermond. Volumes 37/38 concentrated mainly on network topologies, while Volume 53 placed more emphasis on algorithmic aspects. The theme of the present volume – the interaction between interconnection network design and structured communication problems is a synthesis of network topology and communication algorithms.

In response to the call for papers, we received 26 submissions, 15 of which were accepted and appear in this volume. Two other papers, which had been accepted to regular volumes of Discrete Applied Mathematics, and which fit in well with the theme of this special volume, also appear in this collection.

We would like to thank the authors for responding to our call for papers, the referees whose careful reports ensured the high quality of the papers appearing in this volume, and both the authors and referees for their careful attention to the production of revised manuscripts.

We would like to especially thank Editor-in-Chief Peter Hammer and Editorial Manager Nelly Segal for their help. A special volume like this would have been much more difficult without Peter's support and enthusiasm and Nelly's expert advice and organization.

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